



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,182	07/21/2006	Markus Dierker	C 2647 PCT/US	2215
23657	7590	07/26/2010		
FOX ROTHSCHILD LLP 997 Lenox Drive, Bldg. #3 Lawrenceville, NJ 08648			EXAMINER GULLEDGE, BRIAN M	
			ART UNIT	PAPER NUMBER
			1612	
			NOTIFICATION DATE	DELIVERY MODE
			07/26/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket@foxrothschild.com

# Office Action Summary

**Application No.**

10/553,182

**Applicant(s)**

DIERKER ET AL.

**Examiner**

Brian Guldge

**Art Unit**

1612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 January 2010 has been entered.

### ***Previous Rejections***

Applicants' arguments, filed 28 January 2010, have been fully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

### ***Claim Rejections - 35 USC § 112, New Matter***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 12-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** This is a "new matter" rejection. The claim(s) contains subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 12 has been amended to recite the cosmetic composition comprises a “hydrocarbon” mixture instead of a poly- $\alpha$ -olefin mixture produced by the subsequent conditions. There is insufficient support for this limitation in the originally filed disclosure. The specification does not disclose “hydrocarbon” mixtures produced by the method recited. Rather, the specification discloses that cosmetic compositions comprising poly- $\alpha$ -olefins produced by the method. However, the method can be used to prepare mixtures that are not just poly- $\alpha$ -olefins. For example, WO 2004/078336 demonstrates that alcohols such as those within the claimed scope can produce alkyl ethers (page 8, table II), which are not poly- $\alpha$ -olefins, but would be within the broader scope presently recited by claim 12.

***Claim Rejections - 35 USC § 112, 2<sup>nd</sup> Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** The claim recites that said “hydrocarbon mixture comprises from 0.1% to 100% by weight based on the total quantity of oil components.” The claim, however, does not specify of what material or species must be present in the hydrocarbon mixture. The amount recited limits a component of the hydrocarbon mixture, but no ingredient is assigned to meet this limitation.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**Claims 12-14 and 16-33 stand rejected and claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Collin (US Patent 6,464,967).** Applicant argues that the rejection is not proper. Applicant notes that the structure implied by process steps in product-by-process claims should be considered when assessing the patentability of the claims over the prior especially where the product can only be defined by the process steps (such as in the instant situation). The Applicant then refers to the declaration submitted on 28 January 2010 under 37 CFR 1.132 to support the argument that the product claimed and the product disclosed by Collin are patentably distinct.

The declaration is referred to support the assertion that Applicant's hydrocarbon mixture is obtained by a different process and from different starting materials and under different reaction conditions, which inevitably leads to hydrocarbon mixtures which are materially different from the classical poly- $\alpha$ -olefins known in the art. Applicant further argues that the data in the specification also demonstrate the unexpectedly superior properties of an emulsion prepared from the instant hydrocarbon mixture, which is not taught by the prior art.

The Examiner is not persuaded by the arguments. The declaration and Applicant argue that Applicant's hydrocarbon mixtures prepared by dehydrating polymerization are materially different from poly- $\alpha$ -olefins known in the art. The Examiner notes that the rejection was based not on whether the mixtures disclosed are known, but rather the rejection was based on the

material disclosed as known in the art could be prepared using the method recited by the claims, and thus lies within the scope of the claims, and thus anticipating the claims.

The declaration states that the prior art (Collin) and the instant methods use different monomers to produce the material used. The declaration further states that under the dehydrating polymerization reaction conditions an isomeric mixture of at least olefin-like products is produced which further reacts to oligomerize and polymerize and form the product. The declaration states that one of ordinary skill would not expect such a mixture to produce the same product as when polymerizing pure 1-alkenes. Applicant also states that, in a prior art reference, under the dehydrating reaction conditions, primary alcohols are recited are isomerized into various unsaturated monomers which then polymerize with one another. The Examiner considers this not only unpersuasive, but supportive of the contention that the products formed from the prior art monomers (which are olefins) lie within the scope of the claims. It appears that the Applicant is stating that first the primary alcohols undergo a dehydration reaction, thus yielding the corresponding olefin(s), and then these olefins under polymerization. This would imply that the initial step of the method affords a mixture of poly- $\alpha$ -olefins, by first dehydrating and isomerizing the olefins. While the Examiner agrees that polymerization of *pure 1-alkenes* would yield a different mixture than would be afforded by polymerizing a mixture of olefins, which is not what the rejection asserted. Rather, the product prepared by the prior art involved polymerizing a mixture of olefins as well. Applicant has not argued that the mixture of olefins used by Collin lies outside the scope of the claims, but rather that use of a *pure 1-alkene* leads to different products.

As for the unexpected properties, secondary considerations cannot overcome a 102 rejection. See MPEP 2131.04. And additionally, as there was (and presently is) a rejection under 35 USC 103, the argument relating to unexpected properties is not persuasive. To be given substantial weight in the determination of obviousness or nonobviousness, evidence of secondary considerations must be relevant to the subject matter as claimed. See MPEP 716.01(b). The Examiner is not able to make such a determination. The instantly disclosed examples prepare the mixture of poly-alpha-olefins by heating the alcoholic mixture "until the separation of water was observed" (examples 1 & 2). However, this temperature is never stated, and the claims recite that the mixture needs to be heated to between 60 and 340 °C. Thus, the Examiner cannot determine if the disclosed materials lie within the scope of the claims, and thus cannot determine if the examples are relevant to the claimed subject matter.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**Claims 12-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansenne (US Patent 5,747,009) in view of PCT Patent Application Publication WO 03/035707.** The above PCT publication is in a language other than English, and as such the English-language equivalent document Zander et al. (US patent Application Publication 2004/0267073) will be referenced to support the rationale of this rejection

Hansenne discloses cosmetic emulsion compositions comprising from 8 to 50 wt% of a fatty phase which comprises from 5 to 15 wt% of a poly- $\alpha$ -olefin and also from 3 to 7 wt% of an

emulsifying agent (abstract, lines 1-9). Hansenne further teaches that a problem of emulsion formulations is the preservation and stability during storage (column 1, lines 13-15), and one way to address this is to use the disclosed emulsifier (column 1, lines 31-43). Hansenne does not disclose poly- $\alpha$ -olefins prepared according to the instantly recited process.

Zander et al. discloses poly- $\alpha$ -olefins made by the process of providing a primary alcohol, polymerizing said alcohol in the presence of acidic alumino layer silicate, and subsequently hydrogenating the product (abstract, lines 1-7). The polymerization can be performed at temperatures ranging from 60 to 340 C (paragraph [10], lines 1-6). Specific alcohols disclosed include isononyl alcohol (example 5) and 2-ethyl hexanol (example 8). Zander et al. further teaches that the poly- $\alpha$ -olefins have minimal vulnerability to oxidation (paragraph [9], lines 1-5).

Therefore, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have used the poly- $\alpha$ -olefin material disclosed by Zander et al. as the poly- $\alpha$ -olefin in the cosmetic emulsion disclosed by Hansenne. Generally, it is *prima facie* obvious to select a known material (a poly- $\alpha$ -olefin) for incorporation into a composition, based on its recognized suitability for its intended use. See MPEP 2144.07. Additionally, Zander et al. teaches that the specific poly- $\alpha$ -olefin disclosed has improved resistance to oxidation, and Hansenne discloses that it is desirable that the composition have improved stability during storage, and it would be *prima facie* obvious to use the poly- $\alpha$ -olefin material with improved oxidative resistance (improved stability) in a formulation where stability is desired.

The above modified cosmetic comprises ingredients that read on the ingredients instantly recited. Additionally, the amounts taught by Hansenne either read on or overlap the instantly claimed ranges. And in cases involving overlapping ranges, the courts have consistently held



that even a slight overlap in range establishes a *prima facie* case of obviousness. See *In re Peterson*, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003) and MPEP 2144.05(I).

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Gullledge whose telephone number is (571) 270-5756. The examiner can normally be reached on Monday-Thursday 6:00am - 3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BMG

/Frederick Krass/

Application/Control Number: 10/553,182

Page 9

Art Unit: 1612

Supervisory Patent Examiner, Art Unit 1612